

## Contents

### NUMBER 1

- 1 *Robert V. Demicco*. Platform and off-platform carbonates of the Upper Cambrian of western Maryland, U.S.A.
- 23 *Bruce M. Simonson*. Sedimentology of cherts in the Early Proterozoic Wishart Formation, Quebec-Newfoundland, Canada
- 41 *Chang-Shu Yang and Swie-Djin Nio*. The estimation of palaeohydrodynamic processes from subtidal deposits using time series analysis methods
- 59 *Jean Lajoie and Denis A. St-Onge*. Characteristics of two Pleistocene channel-fill deposits and their implication on the interpretation of megasequences in ancient sediments
- 69 *G. Vilks, D. Buckley and L. Keigwin*. Late Quaternary sedimentation on the Southern Sohm Abyssal Plain
- 83 *James P. M. Syvitski, K. W. Asprey, D. A. Clattenburg and Gordon D. Hodge*. The prodelta environment of a fjord: suspended particle dynamics
- 109 *Mike Dickman*. Seasonal succession and microlamina formation in a meromictic lake displaying varved sediments
- 119 *Julian A. Dowdeswell, Lisa E. Osterman and John T. Andrews*. Quartz sand grain shape and other criteria used to distinguish glacial and non-glacial events in a marine core from Frobisher Bay, Baffin Island, N.W.T., Canada
- 133 *Suzanne D. Weedman and Rudy Slingerland*. Experimental study of sand streaks formed in turbulent boundary layers
- 147 *David R. Rubin and Ralph E. Hunter*. Why deposits of longitudinal dunes are rarely recognized in the geologic record
- SHORT COMMUNICATION
- 159 *Peter Ergenzinger*. Electromagnetic devices for measuring bedload transport
- 133 Book reviews
- 139 Forthcoming papers

### NUMBER 2

- 167 *William L. Duke*. Hummocky cross-stratification, tropical hurricanes, and intense winter storms
- 195 *Edward Cotter*. Gravel-topped offshore bar sequences in the Lower Carboniferous of southern Ireland
- 215 *William M. Berelson and S. Duncan Heron (Jr)*. Correlations between Holocene flood tidal delta and barrier island inlet fill sequences: Back Sound-Shackleford Banks, North Carolina
- 223 *Bryan Krapez*. The Ventersdorp Contact placer: a gold-pyrite placer of stream and debris-flow origins from the Archaean Witwatersrand Basin of South Africa
- 235 *M. Mustafa Alam, Keith A. W. Crook and Graham Taylor*. Fluvial herring-bone cross-stratification in a modern tributary mouth bar, Coonamble, New South Wales, Australia
- 245 *Gillian Rex*. A laboratory flume investigation of the formation of fossil stem fills

- 257 *M. R. Talbot*. Major bounding surfaces in aeolian sandstones—a climatic model
- 267 *Dieter A. Rumpel*. Successive aeolian saltation: studies of idealized collisions
- 281 *J. N. J. Visser and K. J. Hall*. Boulder beds in the glaciogenic Permo–Carboniferous Dwyka Formation in South Africa
- 295 *C. P. Gravenor*. Chattermarked garnets found in soil profiles and beach environments

#### DISCUSSION

- 307 *E. D. Orr and R. L. Folk*. Chattermarked garnets found in soil profiles and beach environments
- 279 Book reviews
- 291 Forthcoming papers

### NUMBER 3

- 317 *Daniel W. J. Bosence, Royston J. Rowlands and Mark L. Quine*. Sedimentology and budget of a Recent carbonate mound, Florida Keys
- 345 *Djafar M. Aïssaoui*. Botryoidal aragonite and its diagenesis
- 363 *Robert L. Brenner, Donald J. P. Swift and G. C. Gaynor*. Re-evaluation of conquinoid sandstone depositional model, Upper Jurassic of central Wyoming and south-central Montana
- 373 *Kevin T. Pickering and Richard N. Hiscott*. Contained (reflected) turbidity currents from the Middle Ordovician Cloridorme Formation, Quebec, Canada: an alternative to the antidune hypothesis
- 395 *Paul D. Komar*. The hydraulic interpretation of turbidites from their grain sizes and sedimentary structures
- 409 *Ralph E. Hunter*. A kinematic model for the structure of lee-side deposits
- 423 *Eduardo Garzanti*. The sandstone memory of the evolution of a Triassic volcanic arc in the Southern Alps, Italy
- 435 *Jeffrey Mount*. Mixed siliciclastic and carbonate sediments: a proposed first-order textural and compositional classification
- 443 *Hans-G. Machel*. Fibrous gypsum and fibrous anhydrite in veins

#### DISCUSSIONS

- 455 *G. Shanmugam and R. J. Moiola*. Sedimentary facies of the Nova Scotian upper and middle continental slope, offshore eastern Canada
- 456 *Philip R. Hill*. Dissimilarities between the Scotian Slope and the Hecho Group
- 459 *G. Steinitz*. Diagenetic density inversions and the deformation of shallow marine chert beds in Israel
- 461 *Jonathan Fink and Ze'ev Rechtes*. Reply
- 465 Book reviews
- 471 Forthcoming papers

### NUMBER 4

- 473 *Henry T. Mullins, Sherwood W. Wise (Jr), Anne F. Gardulski, Edward J. Hinchey, Philip M. Masters and D. I. Siegel*. Shallow subsurface diagenesis of Pleistocene periplatform ooze: northern Bahamas

- 495 *John Simpson*. Stylolite-controlled layering in an homogeneous limestone: pseudo-bedding produced by burial limestone
- 507 *C. C. von der Borch, A. E. Grady, R. Aldam, D. Miller, R. Neumann, A. Rovira and K. Eickhoff*. A large-scale meandering submarine canyon: outcrop example from the late Proterozoic Adelaide Geosyncline, South Australia
- 519 *G. Neef, I. R. Plimer and R. S. Bottrill*. Submarine-fan deposited sandstone and rudite in a mid-Cenozoic interarc basin in Maewo, Vanuatu (New Hebrides)
- 543 *J. P. Barusseau, E. H. S. Diop and J. L. Saos*. Evidence of dynamics reversal in tropical estuaries, geomorphological and sedimentological consequences (Salum and Casamance Rivers, Senegal)
- 553 *Andrew C. Morton*. A new approach to provenance studies: electron microprobe analysis of detrital garnets from Middle Jurassic sandstones of the northern North Sea
- 567 *Robert A. Zielinski*. Element mobility during alteration of silicic ash to kaolinite—a study of tonstein
- 581 *N. Lancaster*. Variations in wind velocity and sand transport on the windward flanks of desert sand dunes
- 595 *M. A. Foda, F. I. Khalaf and A. S. Al-Kadi*. Estimation of dust fallout rates in the northern Arabian Gulf
- 605 *Sven Blomqvist*. Reliability of core sampling of soft bottom sediment—an *in situ* study
- SHORT COMMUNICATION
- 613 *Robert Metz*. The importance of maintaining horizontal sieve screens when using a Ro-Tap
- 615 Book reviews
- 625 Forthcoming papers

## NUMBER 5

- 627 *Tim K. Lowenstein and Lawrence A. Hardie*. Criteria for the recognition of salt-pan evaporites
- 645 *Bruce E. Broster and Stephen R. Hicock*. Multiple flow and support mechanisms and the development of inverse grading in a subaquatic glacial debris flow
- 659 *J. R. Ineson*. Submarine glide blocks from the Lower Cretaceous of the Antarctic Peninsula
- 671 *Koji Yagishita*. Evolution of a provenance as revealed by petrographic analyses of Cretaceous formations in the Queen Charlotte Islands, British Columbia, Canada
- 685 *A. G. Davies*. Field observations of the threshold of sediment motion by wave action
- 705 *B. Diem*. Analytical method for estimating palaeowave climate and water depth from wave ripple marks
- 721 *S. Manickam, L. Barbaroux and F. Ottmann*. Composition and mineralogy of suspended sediment in the fluvio-estuarine zone of the Loire River, France
- 743 *Ramadan Abu El-Ella and James M. Coleman*. Discrimination between depositional environments using grain-size analyses
- 749 *Andreas Wetzel*. Asymmetry of *Zoophycos* burrows as a way-up criterion—a reconsideration
- 753 Book reviews
- 761 Forthcoming papers

## NUMBER 6

- 763 *Andrew D. Miall*. Sedimentation on an early Proterozoic continental margin under glacial influence: the Gowganda Formation (Huronian), Elliot Lake area, Ontario, Canada
- 789 *Nicholas Eyles and Bryan M. Clark*. Gravity-induced soft-sediment deformation in glaciomarine sequences of the Upper Proterozoic Port Askaig Formation, Scotland
- 815 *Carl L. Amos and David C. Mosher*. Erosion and deposition of fine-grained sediments from the Bay of Fundy
- 833 *J. D. Kantorowicz*. The petrology and diagenesis of Middle Jurassic clastic sediments, Ravenscar Group, Yorkshire
- 855 *Andrew Watson*. Structure, chemistry and origins of gypsum crusts in southern Tunisia and the central Namib Desert
- 877 *Stephen T. Solomon and Gordon M. Walkden*. The application of cathodo-luminescence to interpreting the diagenesis of an ancient calcrete profile
- 897 *Said Tlig and Ali M'Rabet*. A comparative study of the Rare Earth Element (REE) distributions within the Lower Cretaceous dolomites and limestones of Central Tunisia
- 909 Book reviews
- 917 Forthcoming papers

